



Expanding Rural Access: Delivering Content & Services

Most often the discussion on expanding rural access focuses on topics linked directly with establishing the telecommunications infrastructure. In large part this is due to the difficulties and complexities of aligning public policy, competition, universal service funding, and opening the access to this infrastructure such that rural access can be sustainable.

The reality however is that for all these complexities, getting the infrastructure and access in place is but the beginning. The foundation. This infrastructure is the pipe through which the ultimate value of the telecom investment is delivered. This value is realized through value-added content and services made available to those living in rural communities.

For those living in rural communities there are a range of relevant and impacting ICT-enabled content and services that can be delivered through telecommunications. The following provides a brief description of several key areas of key importance:

- ❖ **Voice**—voice remains a key value-added services as it has quick uptake, generates revenue, is potentially used by anyone in the rural community, and can be used for any use—personal and business. While mobile is exploding, VoIP on a wireless-broadband rural network simply extends this service further and at a lower cost. Also, voice-response systems can deliver a range of relevant information in all sectors.
- ❖ **Health**—a wide range of health care related services can be extended into rural areas via ICTs, including doctor and nurse education/skill building, a range of diagnostic services, health and pharmaceutical information, disease incident tracking,

patient records, online doctor consultations, and advice on local treatments by doctors located in city hospitals.

- ❖ **Education**—solutions are now available to deliver high quality, national standard curriculum and content over ICTs. This can include teacher as well as student training, with tracking of progress is possible. Local teachers can increase their skills/knowledge base, but also can rely on quality on-line in-class content-presentations such that their focus can be shifted to helping the students in their learning process.
- ❖ **Agriculture**—with most rural communities income being agricultural based, ICTs can deliver market information, best practices, farmer education, etc., all of which hold potential for increasing local farmer income.
- ❖ **Financial Services**—those living in rural areas are often without banking services. A range of ICT-based solutions exist for extending micro banking services such as loans, leasing, etc. into the most remote location where networks are in place.
- ❖ **Government Services**—perhaps the greatest value in e-Gov content and services can be realized in rural locations where there are virtually no government offices delivering national or regional services.

The above are but a few areas where ICTs can deliver socioeconomic change in rural locations. This urban rural gap is not simply digital. It is even more socioeconomic, with ICTs helping to narrow this gap.

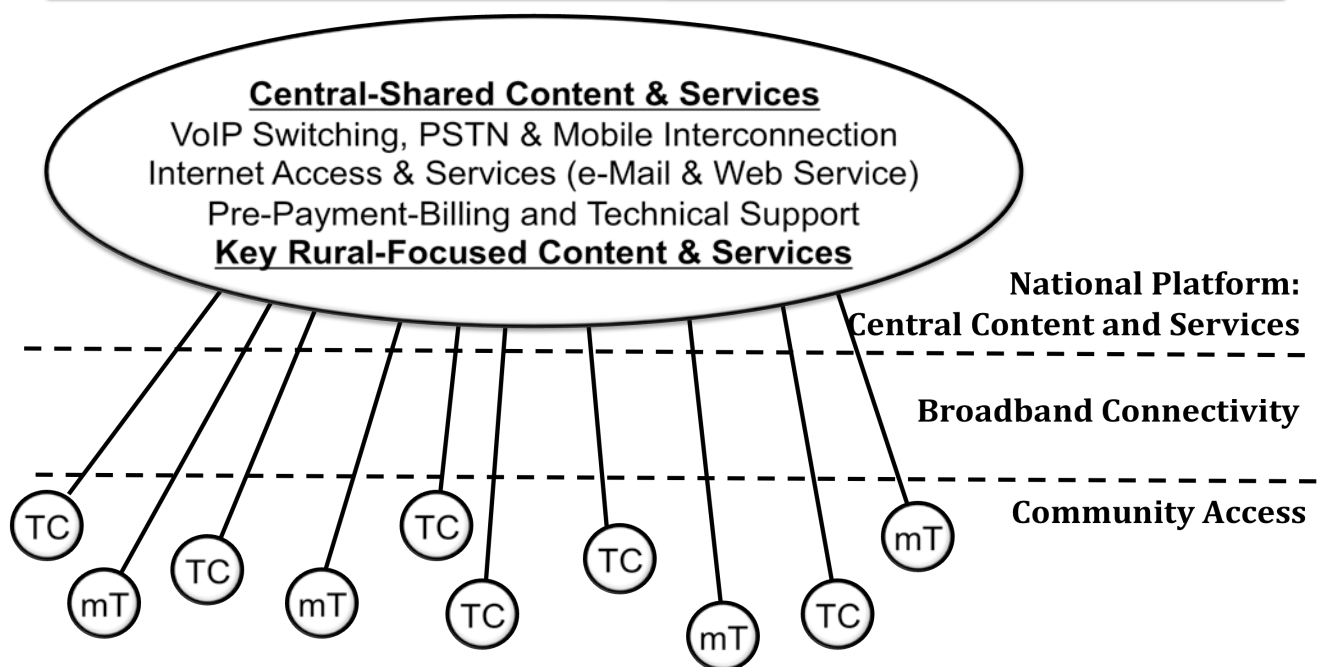
The diagram reflected on the second page provides a high level architecture for delivering value-added content and services to the rural communities. This is a combination of a national-level platform to create, maintain and deliver nation-wide content and services,

combined with broadband connectivity and local community access. The central services are distributed into rural communities through one or more national broadband networks. Access to the content and services within rural communities is made through community TeleCenters. Ideally these TeleCenters are augmented by transforming them into rural community microTelcos or Wireless ISPs. This further expands access through community-wide wireless networks by delivering access directly into schools, health clinics, government offices, small businesses, etc.

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Access and Connectivity to Focused Content and Services



TC = Community TeleCenter

mT = MicroTelco (Community TeleCenter + Wireless Community Network)